- 27 -

## MULTI-LANGUAGE COMMUNICATION METHOD AND SYSTEM

## CLAIMS

5 THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

**(** )

- 1. A multi-language communication method, comprising: providing to each of said persons access to a plurality of language options;
- receiving from each of one or more of said persons an indication of a respective choice of language chosen by said respective person from said language options;

storing said language choices in a database;

and

making said language choices accessible by

one or more applications so that said applications can

when operated selectively provide output to each respective person in the respective language choice.

- A method as claimed in claim 1, wherein those of said persons who do not choose a language are assigned a language choice being a principal language.
- 25 3. A method as claimed in claim 1, wherein said application is an announcement system for making an announcement in the form of a public announcement over a public address system in a principal language; and
- making said announcement available to each 30 person who has indicated a language choice in the form of a personal announcement over a respective personal address system in said respective language choice;

whereby a respective person who has chosen a

- 28 -

language can access said personal announcement in their respective language choice by means of their respective personal address system.

- 5 4. A method as claimed in claim 1, wherein said application is an announcement system for making an announcement in the form of a public announcement by means of a public announcement system, wherein said announcement is presented by means of said public announcement system in at least each language choice.
  - 5. A multi-language communication method for making an announcement to a plurality of persons, comprising:

providing to each of said persons access to a plurality of language options;

receiving from each of one or more of said persons an indication of a respective choice of language chosen by said respective person from said language options;

20 making said announcement in the form of a public announcement over a public address system in a principal language; and

25

30

making said announcement available to each person who has indicated a language choice in the form of a personal announcement over a respective personal address system in said respective language choice;

whereby a respective person who has chosen a language can access said personal announcement in their respective language choice by means of their respective personal address system.

6. A method as claimed in claim 5, including making said respective language choices accessible by an

- 29 -

attendant so that said attendant can anticipate the language needs of a respective person.

7. A method as claimed in claim 5, wherein said personal announcement comprises a prerecorded audio translation of said announcement in the respective language choice of a respective person, played over one or more personal loudspeakers located proximate said respective person.

10

15

- 8. A method as claimed in claim 7, wherein said personal announcement comprises a prerecorded audio translation of said announcement in the language choice of a respective person, accessible by means of a headphone or ear-piece output allocated to said respective person, whereby said respective person can access said personal announcement by means of a headset connected to said output.
- A method as claimed in claim 5, wherein said 9. 20 announcement is an audio announcement and said method includes translating said announcement by real-time computer translation into the respective choice of a respective person to form said personal 25 announcement, and playing said personal announcement over one or more personal loudspeakers proximate said respective person.
- 10. A method as claimed in claim 5, wherein said personal announcement comprises a prerecorded text translation of said announcement in the language choice of a respective person, accessible by means of a display allocated to said respective person, whereby

- 30 -

said respective person can read said personal announcement on said display.

11. A method as claimed in claim 5, wherein said announcement is a text announcement and said method includes translating said announcement by real-time computer translation into the respective language choice of a respective person to form said personal announcement, and making said personal announcement accessible by means of a display allocated to said respective person, whereby said respective person can read said personal announcement on said display.

10

30

- 12. A method as claimed in claim 5, including making said announcement available to each of said persons who has not indicated a language choice in the form of a personal announcement over a personal address system in said principal language.
- 20 13. A multi-language communication system for making an announcement to a plurality of persons, comprising:
  - a database for storing a respective language choice of each of said persons;
- a public address system for making said 25 announcement in the form of a public announcement in a principal language; and
  - a plurality of personal address systems, each for making said announcement available to a respective person in the form of a personal announcement in the respective language choice of that respective person;
  - a control system operable to select each of said personal announcements on the basis of said public announcement and said language choices, and to

- 31 -

direct select each of said personal announcements to the corresponding personal address system of each respective person;

wherein said language choice of a respective person comprises said principal language where said person has not indicated a language choice, whereby each of said persons can access said personal announcement in their respective language choice.

10 14. A system as claimed in claim 13, including a real-time translation module for providing any one or more of: text to text, text to voice, voice to voice, and voice to text real-time translation, so that said system can provide real-time translations of said announcement.

()

20

25

30

- 15. A system as claimed in claim 14, wherein said module comprises a server provided with real-time translation software.
- 16. A system as claimed in claim 13, wherein said respective language choices are accessible by an attendant so that said attendant can anticipate the language needs of a respective person.
  - 17. A system as claimed in claim 13, including a prerecorded audio translation of the announcement in each available language choice, and is configured to play the appropriate audio translation corresponding to the respective language choice of a respective person over one or more personal loudspeakers located proximate said respective person.

- 32 -

- 18. A system as claimed in claim 13, including a real-time translation module operable to prepare an audio translation of said announcement in each chosen language, said system being configured to play the appropriate audio translation corresponding to the respective language choice of a respective person over one or more personal loudspeakers located proximate said respective person.
- 19. A system as claimed in claim 13, including a real-time translation module operable to prepare a text translation of said announcement in each chosen language, said system being configured to display the appropriate text translation corresponding to the respective language choice of a respective person on a display allocated to said respective person.
- 20. A system as claimed in claim 13, including a console having a display and a data entry device for 20 each of said persons for providing said language options to each of said persons and to allow each respective person to select said language option.
- 21. A system as claimed in claim 13, including a console having a display and a data entry device for each of said persons, each of said consoles providing access to a plurality of predefined service request options, so that each of said persons can request the corresponding service by means of said console.

30

22. A multi-language communication method for communicating with a plurality of passengers, comprising:

providing to each of said passengers access to a plurality of language options;

receiving from each of one or more of said persons an indication of a respective choice of language chosen by said respective person from said language options; and

providing to each of said passengers who has chosen a language access to content in his or her respective language of choice.

10

**(**)

5

23. A method as claimed in claim 22, including providing to each of said passengers who has not chosen a language access to content in a principal language.

15

20

25

- 24. A method as claimed in claim 22, wherein said content comprises any one or more selected from the set comprising: promotional material, educational material, entertainment, safety announcements, subtitles for movies and closed captioning.
- 25. A method as claimed in claim 22, including providing at least one announcement to each of said passengers by means of a personal address system, wherein said announcement is in the respective language of choice of each passenger or, or, if no language was chosen by a respective passenger, in a principal language.
- 30 26. A multi-language communication system for communicating with a plurality of passengers, comprising:

a database for storing a respective language

10

choice of each of said passengers;

a control system operable to retrieve said language choices from said database and operable to provide each of said passengers with access to content in his or her respective language of choice or, if no language was chosen by a respective passenger, in a principal language;

a plurality of output devices, each assigned to a respective passenger for providing said content to said respective passenger in his or her respective language of choice or, if no language was chosen by a respective passenger, in a principal language.

- A system as claimed in claim 26, wherein said 27. 15 respective language choices are accessible by passenger attendant so that said attendant anticipate the language needs of a. respective passenger.
- 20 28. A system as claimed in claim 26, wherein said output device is a display, an audio output device, or both a display and an audio output device.
- 29. A system as claimed in claim 26, wherein said announcement comprises visual material displayable for each respective passenger on a display assigned to that respective passenger.
- 30. A system as claimed in claim 26, wherein said announcement comprises an audio announcement directed for each respective passenger to an audio output assigned to that respective passenger, whereby each passenger can listen to said announcement, such as by

5

means of a headset.

- 31. A system as claimed in claim 26, including a public address system for making said announcement in the form of a public announcement to said passengers in said principal language.
- 32. A system as claimed in claim 26, wherein said system is operable to receive said language choices from an operator who has received the respective language choices from one or more of the passengers.